

REMARKS

Claims 1-23 are pending in the present application. In the Office Action mailed April 18, 2006, the Examiner rejected claims 1 and 8 under 35 U.S.C. §102(b) as being anticipated by Oestreicher et al. (UPS 2,617,913), and rejected claim 18 under §102(b) as being anticipated by Hsien et al. (USP 5,276,305). Claims 19 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hsien et al. Claims 11 and 12 were rejected under §103(a) as being unpatentable over Oestreicher et al. in view of Toth et al. (USP 4,079,231). Claim 21 was rejected under §103(a) as being unpatentable over Hsien et al. in view of Zucker et al. (USP 6,906,285). Claim 22 was rejected under §103(a) as being unpatentable over Hsien et al. in view of the Intellon white paper no. 0027.

The Examiner also rejected claims 17 and 21 under 35 U.S.C. §112, second paragraph, as being indefinite. Accordingly, claim 17 has been amended to correct a typographical error and now properly recites the relationship between the first and second voltages. Applicant appreciates the Examiner's diligence in this regard. Claim 21 has also been amended to correct a typographical error by replacing "wire feeder" with "remote device" to reflect the correct claim scope and antecedence.

Claims 2-7, 9, 10, 13-16, and 20 were indicated as containing allowable subject matter. Such indication is appreciated.

In regard to the rejection of claim 1 under §102(b), the Examiner stated that Fig. 1 and the text in columns 2 and 3 of Oestreicher teach all elements thereof. In particular, the Examiner indicated that element 11 of Oestreicher is a "remote device" and that elements 11 and 7 in combination constitute a "controller," as called for in claim 1. Initially, Applicant notes that the Examiner has identified the same component of Oestreicher as constituting two distinct claimed elements: both a remote device and a controller. However, element 7 of Oestreicher is the workpiece and element 11 is merely an electrode, not a remote device or controller. Col. 2., lns. 27-28.

One of ordinary skill in the art would readily appreciate that the term electrode refers merely to a solid conductor for making an electrical welding connection. The term "electrode" does not connote a device, but rather merely an electrically conductive object. *See Id.* (physical contact of electrode 11 to workpiece 7 completes a circuit). In addition,

Oestreicher does not disclose that the electrode 11 thereof is “operable in a standby mode,” as claimed. It may be true that the power source of Oestreicher is disclosed as having some lowered voltage state, but claim 1 does not call merely for the power source to have a low voltage state. Rather, claim 1 recites that the remote device must be operable in a standby mode. Furthermore, the Examiner’s reasoning that elements 11 and 7 are a controller is illogical and unfounded. Two motionless conductive objects do not, by themselves, constitute anything that controls.

While Applicant appreciates the Examiner’s rigor in examining the present claims, it is apparent that the Examiner’s interpretation of the claimed elements is far beyond the broadest reasonable interpretation thereof. This is even more apparent in the Examiner’s rejection of claim 8, which recites “a modulated signal indicative of a welding process initiation command.” Though the Examiner maintained that contact between electrode 11 with workpiece 7 would provide a “modulated” signal to initiate welding, Oestreicher does not mention any kind of signal modulation or receipt of any “commands” whatsoever. With the limitations of 10/709,148 being wholly absent, Applicant believes that claim 1 and claim 8 are patentably distinct over the art of record and respectfully requests withdrawal of the rejections thereof.

With respect to the rejection of claim 18 under § 102(b) as being anticipated by Hsien, Applicant believes that with the present amendments, one of the significant differences between the system of Hsien and the present invention is more clearly illustrated. The system of Hsien is limited to transmission of analog signals “[d]uring the welding operation.” Col. 2, ln. 36; *see also* col. 2, lns. 49-68 (“Because the welding wire (2) carries direct current, a capacitor (38) is used to separate the direct current and (sic) the output end of the fm modulation integrated circuit (36)”). In contrast, the present invention as recited in claim 18 calls for transmitting a data packet over a weld cable “regardless of whether a welding power for the welding-type process is being supplied thereby.” In other words, Hsien requires that the analog transmission occur when a DC welding voltage for a welding operation exists on the welding wire, but the present invention does not. Thus, Hsien does not teach or suggest all elements of claim 18, and Applicant respectfully requests withdrawal of the rejection thereof.

In rejecting claim 12 as being obvious over Oestreicher in view of Toth, the Examiner stated that “[i]t would have been obvious to have used the system of Oestreicher (2,617,913) to control any conventional remote welding device, including one with a wire feeder.” As the motivation for this conclusion, the Examiner asserted that Toth teaches “that a wire feeder can be controlled by a system sensitive to a modulated low voltage standby mode.” While some embodiments of the present invention include control of a power source, Applicant notes that claim 12 does not explicitly recite any “control,” let alone control of a remote device, contrary to the Examiner’s implication.

In addition, the Examiner’s assertion that Oestreicher involves remote control of a remote device is inconsistent with the Examiner’s rejection of claim 1 in which the Examiner identified the electrode 11 as being both the remote device and the controller. As Applicant explained above, Oestreicher does not teach a controller. Yet, the Examiner provided no explanation whatsoever for how the device of Oestreicher, which simply adjusts voltage whenever the electrode completes a circuit, could be modified to supply varying voltages to a wire feeder. *See* Col. 3, Ins. 4-25. The system therein would not operate were the electrode 11 replaced with a wire feeder, because wire feeders themselves do not complete circuits with workpieces.

The deficiencies of the rejection are not cured by the inclusion of Toth. Toth is inapposite and uncombinable with Oestreicher since the system of Toth uses a separate device, sensing circuit 28, to provide an initial low voltage signal (Toth, col. 2, Ins. 47-50) while the system of Oestreicher merely adjusts the voltage of the same power source (Oestreicher, col. 3, Ins. 4-25). Furthermore, Toth does not teach that the wire feeding arrangement 10, M, 14 therein receives this initial low voltage since it is not shown or described as being connected across the potential of R_s . *See* Toth, col. 2, ln. 67 to col. 3, ln. 1. As such, neither Oestreicher, Toth, or a combination thereof teaches or suggests each and every limitation of claim 18, and Applicant respectfully requests withdrawal of the rejection thereof.

New claim 24 includes the subject matter of original claim 18 and allowable claim 20. The United States Patent Office is authorized to charge the credit card as filed

herewith in the amount of \$250.00 for fees associated with entering the claim newly presented herein.

Therefore, in light of at least the foregoing, Applicant respectfully believes that the present application is in condition for allowance. Claims 1, 12, and 18 have been shown to be patentable over the art of record. Therefore, pursuant to the chain of dependency and/or the Examiner's indications of allowability, all claims depending therefrom are also patentable. As a result, Applicant respectfully requests timely issuance of a Notice of Allowance for claims 1-24.

Applicant appreciates the Examiner's consideration of these Amendments and Remarks and cordially invites the Examiner to call the undersigned, should the Examiner consider any matters unresolved.

Respectfully submitted,

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¹The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-2623. Should no proper payment be enclosed herewith, as by credit card authorization being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-2623. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extensions under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-2623. Please consider this a general authorization to charge any fee that is due in this case, if not otherwise timely paid, to Deposit Account No. 50-2623.